

REMARKS/ARGUMENTS

In response to the Office Action dated June 7, 2004, claims 7 and 9 are amended. Claims 1-10 are now active in this application. No new matter has been added.

REJECTION OF CLAIMS UNDER 35 U.S.C. § 112, FIRST PARAGRAPH

Claims 1-6 and 10 are rejected under 35 U.S.C. § 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or used the invention

The Examiner maintains that “The claims disclose an edge detecting means, selecting means, calculating means, enhancement means and edge enhancing means. The Elements performing the functions are not disclosed in the specification. The specification does disclose on page 8, line 6 a controller. However, this is insufficient to disclose one controller as all of the claimed means.”

The rejection is respectfully traversed.

Lack of enablement under the first paragraph of 35 U.S.C. § 112 is a question of law. *U.S. Steel Corp. v. Philips Petroleum Co.*, 865 F.2d 1247, 9 USPQ2d 1461 (Fed. Cir. 1989); *U.S. v. Telectronics Inc.*, 857 F.2d 778, 8 USPQ2d 1217. In rejecting a claim under the first paragraph of 35 U.S.C. § 112, it is incumbent on the Patent and Trademark Office to establish a basis in fact and/or cogent technical reasoning to support the conclusion that one having ordinary skill in the art would not have been able to practice the claimed invention armed with the supporting specification, without undue experimentation. See *In re Marzocchi*, 439 F.2d 220, 169 USPQ 367 (CCPA 1971).

See also *In re Strahilevitz*, 668 F.2d 1229, 212 USPQ 561 (CCPA 1982); *In re Angstadt*, 537 F.2d 498, 190 USPQ 214 (CCPA 1976).

It is Applicant's position that the Official Action is silent as to any basis in fact and/or technical reasoning to logically support the imposed rejection for lack of adequate enabling support under the first paragraph of 35 U.S.C. § 112. The mere observation by the Examiner that "The Elements performing the functions are not disclosed in the specification", "The specification does disclose on page 8, line 6 a controller", and "However, this is insufficient to disclose one controller as all of the claimed means," with pronouncement of the legal conclusion of lack of enablement, does not establish a *prima facie* basis to deny patentability to the claimed invention for lack of enablement.

The subject matter to which the claimed invention is directed is an image processing apparatus. FIG. 1 shows the overall construction of such an image processing apparatus and has a *controller 1 at its center for controlling the overall image processing apparatus provided with a CPU* (see page 6, lines 12-15). As noted above, a patent disclosure is directed to one having ordinary skill in the art and conventional knowledge is read into this disclosure. Such conventional knowledge includes the fact that a CPU refers to a Central Processing Unit, which is the computing part of a computer, and that the CPU manipulates data and processing instructions coming from software or a human operator. See the enclosed definition from Newton's Telecom Dictionary (1994).

FIG. 2 is a block diagram centered on controller 1. *The controller 1 has a CPU 201 at its center, and connected to the CPU 201 via a data bus 220 are a ROM 203 for storing various processing programs and the like, RAM 204 for storing programs and various data, ...* (page 7, lines 8-12).

The *controller 1 performs various types of image processing on a digital image*. The digital image edge enhancement process is described below. *FIG. 3 shows the flow of the edge enhancement process performed by the controller 1* (page 8, lines 6-10).

The claimed image processing apparatus comprises:

- edge detecting means for determining the presence/absence of an edge at each pixel of input image data;

- selecting means for selecting a weighting matrix corresponding to the position of the edge of each target pixel determined to have an edge by said edge detecting means;

- calculating means for calculating data of the target pixel and the pixels surrounding the target pixel using the weighting matrix selected by said selecting means;

- enhancement range determining means for determining the range of edge enhancement of the target pixel by comparing the calculation result of said calculating means to a specific threshold value; and

- edge enhancing means for executing an edge enhancement process on data of object pixels within the enhancement range determined by said enhancement range determining means.

Each of the functions performed with respect to the recited “means” is shown in FIG. 3 and/or described in the remaining portion of the specification (page 8, line 11 through page 14, line 16) with reference to FIGS. 4-13. Thus, a description as to how controller 1, which includes CPU 201 at its center, performs the functions with respect to each of the recited “means” is describe in the specification. In fact, a detailed description is provided of this subject matter, which description surely would enable one of ordinary skill in the art to make and use the invention.

Applicant submits that the Examiner has not applied the correct test or followed the judicially mandated approach to resolve the legal question of enablement. The Examiner attempts to discharge the duty of establishing a *prima facie* case by merely observing that “The Elements performing the functions are not disclosed in the specification” and that “The specification does disclose on page 8, line 6 a controller”. The Examiner then merely concludes that “this is

insufficient to disclose one controller as all of the claimed means” without explanation as to why, one of ordinary skill in the art, armed with the present specification, especially the disclosure from page 8, line 11 through page 14, line 16 and FIGS. 3-13, would not understand how CPU 201 would manipulate data and processing instructions coming from software or a human operator to perform the functions recited by corresponding “means”. Furthermore, the Examiner has not fully explained why a single CPU is not capable of performing different functions/processings in response to processing instructions coming from software or a human operator. In this regard, Applicant wishes to point out that most computers (e.g., a desktop computer) have a single CPU and can perform many different functions/processings required in carrying out a comprehensive task such as word processing using Word.

In view of the above, it is submitted that the Examiner has not explained why one having ordinary skill in the art, armed with the supporting specification, would not understand how to make and use the invention. The contention by the Examiner that “The claims disclose an edge detecting means, selecting means, calculating means, enhancement means and edge enhancing means”, “The Elements performing the functions are not disclosed in the specification”, “The specification does disclose on page 8, line 6 a controller” with the assertion “However, this is insufficient to disclose one controller as all of the claimed means” is not a proper test in determining enablement.

In particular, contrary to what is require in a proper test in determining enablement, the Examiner has not presented on this record any determination as to the level of ordinary skill in the art. The Examiner also has not presented on this record any assessment of the relative degree of sophistication or complexity of the claimed subject matter. Moreover, the Examiner apparently failed to recognize that the supporting disclosure need only provide any mode for enablement of the

claimed invention. *Engel Industries, Inc. v. The Lockformer Co.*, 946 F.2d 1528, 20 USPQ2d 1300 (Fed. Cir. 1991).

It is submitted that the present disclosure would enable a person of ordinary skill in the art of make and use the invention.

In *In re Marzocchi, supra*, at 169 USPQ 369, the Court stated:

[2] As a matter of Patent Office practice, then, a specification disclosure which contains a teaching of the manner and process of making and using the invention in terms which correspond in scope to those used in describing and defining the subject matter sought to be patented *must* be taken as in compliance with the enabling requirement of the first paragraph of § 112 *unless* there is reason to doubt the objective truth of the statements contained therein which must be relied on for enabling support . . . In any event, it is incumbent upon the Patent Office, whenever a rejection on this basis is made, to explain *why* it doubts the truth or accuracy of any statement in a supporting disclosure and to back up assertions of its own with acceptable evidence or reasoning which is inconsistent with the contested statement. Otherwise, there would be no need for the applicant to go to the trouble and expense of supporting his presumptively accurate disclosure. Cf. *In re Gazave*, 54 CCPA 1524, 379 F.2d 973, 154 USPQ 92 (1967); *In re Chilowsky*, 43 CCPA 775, 229 F.2d 457, 108 USPQ 321 (1956).

In summary, the Examiner has failed to discharge the initial burden of establishing a basis in fact and/or cogent technical reasoning to support the legal conclusion that one having ordinary skill in the art would not have been able to practice the claimed invention armed with the supporting specification without undue experimentation. *In re Strahilevitz, supra; In re Angstadt, supra; In re Marzocchi, supra*. The weakness in the Examiner's position is underscored by the absence of any determinations as *to the level of skill in the art and the relative complexity of the involved subject matter*.

It is, therefore, Applicant's position that the Examiner has not discharged the judicially mandated burden of establishing a *prima facie* basis to deny patentability to the claimed invention

under the first paragraph of 35 U.S.C. § 112. Accordingly, withdrawal of the erroneously imposed rejection of claims 1-6 and 10 is respectfully solicited.

REJECTION OF CLAIMS UNDER 35 U.S.C. § 102 AND § 103

Claims 7-9 are rejected under 35 U.S.C. § 102(b) as being anticipated by Nagao (USPN 6,055,340).

The rejections are respectfully traversed.

The factual determination of lack of novelty under 35 U.S.C. § 102 requires the identical disclosure in a single reference of each element of a claimed invention such that the identically claimed invention is placed into possession of one having ordinary skill in the art. *Helifix Ltd. v. Blok-Lok, Ltd.*, 208 F.3d 1339, 200 U.S. App. LEXIS 6300, 54 USPQ2d 1299 (Fed. Cir. 2000); *Electro Medical Systems S.A. v. Cooper Life Sciences, Inc.*, 34 F.3d 1048, 32 USPQ2d 1017 (Fed. Cir. 1994).

There is a significant difference between the claimed invention and the arrangement disclosed by Nagao that scotches the factual determination that Nagao identically describes the claimed inventions within.

Each of claims 7 and 9 requires, *inter alia*, determining the range of edge enhancement for the target pixel based on a result of comparing calculated data of the target pixel and pixels surrounding the target pixel using selected weighting matrix, to a specific threshold value. The Examiner refers to fig 3, col. 13, lines 58-67 and column 14, lines 1-2 as disclosing such determination of the range of enhancement for the target pixel. However, no comparing of calculated data of the target pixel and pixels surrounding the target pixel using selected weighting matrix, to a specific threshold value can be found. In fact, the portions referred to do

not establish a range to perform edge enhancement. Edge enhancement is described at item 9) at column 18. In fact, no clear description of determining of the range of edge enhancement for the target pixel can be found

The above argued difference(s) between the claimed steps vis-à-vis the steps of Nagao undermine the factual determination that Nagao identically describes the claimed inventions within the meaning of 35 U.S.C. § 102. *Minnesota Mining & Manufacturing Co. v. Johnson & Johnson Orthopaedics Inc.*, 976 F.2d 1559, 24 USPQ2d 1321 (Fed. Cir. 1992); *Kloster Speedsteel AB v. Crucible Inc.*, 793 F.2d 1565, 230 USPQ 81 (Fed. Cir. 1986). Applicants, therefore, submit that the imposed rejection of claims 7-9 under 35 U.S.C. § 102 for lack of novelty as evidenced by Nagao is not factually or legally viable and, hence, solicit withdrawal thereof.

CONCLUSION

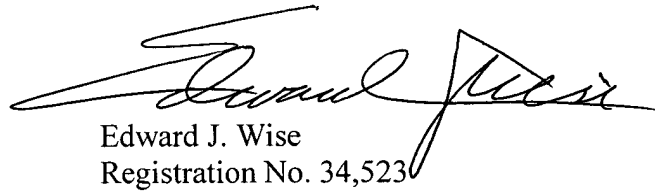
Accordingly, it is urged that the application, as now amended, is in condition for allowance, an indication of which is respectfully solicited. If there are any outstanding issues that might be resolved by an interview or an Examiner's amendment, Examiner is requested to call Applicants' attorney at the telephone number shown below.

09/630,572

To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account 500417 and please credit any excess fees to such deposit account.

Respectfully submitted,

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